



MATRIX INTERNATIONAL (UK) LTD.

BASIC PROJECT OVERVIEW

Basic list of Operations for Aluminium Smelter

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1 Abstract

Matrix implemented the software, Electrical and SCADA system for a Aluminium Smelter.

2 Machine Assets

- Anodes/Cathodes
- High power Substation & Transformers
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3 Process Function

- Electrorefining - increasing the purity of a metal
- Electrosynthesis - seperating metal
- Electrowinning/ElectroExtraction - extracting metal from ore.
- Electrical control of current
- Replacing of Cathodes or anodes damaged/ deteriorated via electrolysis.

4 Software Function

- Recipie handling - via a SCADA system
- Maintenance reporting - Sensors report state of various critical parts to aid in the maitence process pre-emptively.
- Part Tracking - MES system to ensure a paper trail for batches of product.
- Reporting - for information with respect to how to improve the system.